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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,431	01/10/2001	Bruce G. Lindsay	CA9-2000-0014/1851P	8483

7590 04/02/2004

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EXAMINER	
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ART UNIT	PAPER NUMBER
2172	13

DATE MAILED: 04/02/2004

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 15

Application Number: 09/757,431
Filing Date: January 10, 2001
Appellant(s): LINDSAY ET AL.

Joyce Tom – Reg. No. 48,681
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 03/03/2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-14 and 56-57 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,353,820	Edwards et al.	03-2002
6,363,387	Ponnekanti et al.	03-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim1-14 and 56-57 rejected under 35 U.S.C. 103(a). This rejection is set forth in prior Office Action, Paper No. 8.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-14 and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,363,387 issued to Ponnekanti et al. (hereinafter Ponnekanti) in view of US Patent No. 6,353,820 issued to Edwards et al. (hereinafter Edwards).

With respect to claim 1, Ponnekanti discloses in response to a data manager (data page table for query processing: col. 8, lines 6-20; also see fig. 2B); call to locate a data identifier in an index corresponding to a selected key value (data records or rows of database table: RID or page ID: col. 8, lines 18-20, and also see col. 4, lines 31-54), performing the step of locating the data identifier in the index for the selected key value (col. 16, lines 5-30); and continuing to carry out an index-data fetch for another data identifier (scanning for the next qualifying row: col. 16, lines 28-30 and lines 54-55), if there is another data identifier for the selected key value in the index, and the index manager receives a specific condition from the data manager (col. 16, lines 12-44).

As to the limitation, "issuing a callback," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program in order to return

the record associated with index key value (col. 7, lines 10-18). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3, lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

With respect to claim 2, Ponnekanti discloses a method for processing a database query as discussed in claim 1.

As to the limitation, "the data identifier is to be returned to a runtime," Ponnekanti does not explicitly indicate runtime.

However, Edwards discloses runtime routine for a call program (col. 5, lines 28-32).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program including a runtime routines in order to return the record associated with index key value (col. 7, lines 10-18 and col. 5, lines 28-32). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3, lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

With respect to claim 3, Ponnekanti discloses wherein the determination involves determining whether a predicate check or a data consuming operation on the data are possible; and wherein the predicate check or the data consuming operation is performed if it is possible to perform the predicate check or the data consuming operation and a specific condition is returned to the index manager (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14).

With respect to claim 5, Ponnekanti discloses a no data return condition (overflow condition; col. 9, lines 40-44).

With respect to claims 6-7, Ponnekanti discloses a method for processing a database query as discussed in claim 1. Also Ponnekanti discloses B-tree for data page table (col. 9, lines 30-40) and data identifier such as RID: col. 10, lines 30-51).

As to the limitation, "a callback to the data manager," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program in order to return the record associated with index key value (col. 7, lines 10-18). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3,

lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

Claim 8 is essentially the same as claim 1 except that it is directed to a computer readable medium rather than a method ('387 of data page table for query processing: col. 8, lines 6-20; also see fig. 2B; data records or rows of database table: RID or page ID: col. 8, lines 18-20, and also see col. 4, lines 31-54; col. 16, lines 5-30; and col. 16, lines 12-44; and '820 of col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 9 is essentially the same as claim 2 except that it is directed to a computer readable medium rather than a method (col. 5, lines 28-32), and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 10 is essentially the same as claim 3 except that it is directed to a computer readable medium rather than a method (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14), and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 11 is essentially the same as claim 4 except that it is directed to a computer readable medium rather than a method (predicates in the SARS for filtering by query processing module: col. 12, lines 66-67 and col. 13, lines 1-14), and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 12 is essentially the same as claim 5 except that it is directed to a computer readable medium rather than a method (overflow condition; col. 9, lines 40-44), and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 13 is essentially the same as claim 6 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 14 is essentially the same as claim 7 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claim 56, Ponnekanti discloses a method for processing a database query as discussed in claim 1. Also Ponnekanti discloses B-tree for data page table (col. 9, lines 30-40) and data identifier such as RID: col. 10, lines 30-51).

As to the limitation, "a callback to the data manager," Ponnekanti does not explicitly indicate the callback.

However, Edwards discloses issuing the call to the calling program for index key value in the searching index key (col. 7, lines 10-18 and col. 5, lines 28-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Ponnekanti with the teachings of Edwards so as to have a callback to the calling program in order to return the record associated with index key value (col. 7, lines 10-18). This combination would provide a method including calls to the index processing performance-enhancing subroutine and a subsequent query issues an index search to an identical index (col. 3,

lines 30-32 and lines 60-65). Also, this method would provide the index manager to locate the index and continue scanning the table at the next record row (Ponnekanti – col. 16, lines 20-40) in the fetching index-data environment.

Claim 57 is essentially the same as claim 56 except that it is directed to a computer readable medium rather than a method (col. 7, lines 10-18 and col. 5, lines 28-33), and is rejected for the same reason as applied to the claim 56 hereinabove.

(11) Response to Argument

Applicants argued that, "Edwards fails to teach or suggest an index manager ""issuing a callback to the data manager"" (Page 5 of Appeal Brief, line 5 and lines 16-18).

Edwards et al. Of 6,353,820 (hereinafter Edwards) teaches the search next index function that is used to return key value information to the calling program. Also this function will call the RFM (Relational File Manager) retrieve record function on the caller to return the record associated with the index key value (col. 7, lines 1-20, also see fig. 2 and fig. 3a).

Applicants argued that, "Ponnekanti in view of Edwards fails to teach or suggest "continuing to carry out an index-data fetch ...from the data manager in response to the callback." (Page 7 of Appeal Brief, lines 16-16).

Ponnekanti et al. Of 6,363,386 (hereinafter Ponnekanti) teaches scanning for the next row for the key value or data identifier (col. 16, lines 20-30 and lines 54-55).

Applicants argued that, "Ponnekanti and Edwards fails to teach or suggest an index manger that "does not release the stabilization of the index page during a callback to the data manager." (Page 9 of Appeal Brief, lines 3-5).

Ponnekanti teaches the index data page is release if the index page has changed since the latch was dropped and the index manager unlatches the index page before returning the RID (as key value) to the data layer (col. 14, lines 28-46, and col. 16, lines 6-44).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

ANH LY, Patent Examiner, AU-2172
March 26, 2004

Conferees

Shahid Alam, Primary Patent Examiner, AU-2172

Alford Kindred, Primary Patent Examiner, AU-2172

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APPEAL CONFERCENCE

OTHER TIME CODE: 1120-41

SERIAL NO.: 09/757,431

DATE: 25 March 2004

EXAMINER: Anh Ly

CONFEREES:

Name: Shahid Alam SA

Name: Alford Kindred

DECISION: Send the case to the board.